The Commonwealth of Massachusetts
Executive Office of Public Safety and Security
Department of Fire Services
P.O. Box 1025 ~ State Road
Stow, Massachusetts 01775
(978) 567~3100 Fax: (978) 567~3121
www.mass.gov/dfs

DEVAL L. PATRICK
GOVERNOR

TIMOTHY P. MURRAY
LT. GOVERNOR

MARY ELIZABETH HEFFERNAN
SECRETARY

STEPHEN D. COAN
STATE FIRE MARSHAL

For Immediate Release: October 9, 2012
Contact: Jennifer Mieth, (978) 567-3381

Lawrence Incident Reinforces Safety For Do-It-Yourself Projects

This weekend, a terrible incident occurred in Lawrence where a man and a 13-year old boy were seriously injured when flammable vapors ignited. Investigators believe that the two were using a professional solvent to remove carpet glue in the basement of the home at 71 Woodland Street and that the vapors exploded when they ignited. There were a number of pilot lights for furnaces and hot water heaters, any one of which could have provided the ignition source.

State Fire Marshal Coan said, "It appears this product was highly flammable and contained warnings not to use it in enclosed spaces such as basements. It is important to read the labels and follow the instructions for safe use of all chemical products to ensure both health and fire safety."

Do-It-Yourself Project Safety

State Fire Marshal Stephen D. Coan and fire officials across the state would like to offer safety tips when using flammable liquids and solvents in do-it-yourself projects. Products such as the one used in Lawrence must be kept away from pilot lights or other heat sources and used in well-ventilated areas. Vapors can accumulate in enclosed spaces and travel distances to find an ignition source, then explode or start a fire.

Do-it-yourself projects often involve using products with high VOC's (volatile organic compounds), which makes them flammable. Examples of these products are oil-based paints and stains, varnishes and polyurethane, solvents, paint thinners, etc. Even cooking oil is a combustible liquid. Products with lower VOCs produce fewer and less toxic vapors making them less dangerous to breath and less likely to start a fire.

State Fire Marshal Stephen D. Coan said, "Look for less flammable products for home projects, those with a flashpoint of 100°F/38°C or greater. Be sure to extinguish all open flames and ignition sources and provide adequate ventilation in the work area."

What Is a Flashpoint?

The flashpoint of a liquid is the lowest temperature at which it produces enough vapor to catch fire in the presence of a flame or other ignition sources. The lower the flashpoint, the more flammable the liquid. The flashpoint should be found on the product label but can also be found on the *Material Safety Data Sheet* or by contacting the manufacturer.

Dispose of Oily Rags Properly

He added, "It's also important to properly dispose of any rags used in the project." Oily rags have a long history of being a source of fire, because people are not aware that they have the ability to spontaneously combust and catch on fire. Oily rags that get folded or balled up and tossed on the floor have the danger of going through a process that starts with oxidation. As the oil is drying on the rag, it produces heat, and air gets trapped in the folds or balled up portions. Heat and oxygen are combined in addition to the rag, which is usually made of combustible cloth that can become a source of fuel. Heat, oxygen and fuel are all that is needed to create a fire, which is why oily rags that are not disposed of properly can create a fire that people are not prepared for.

How to Dispose of Oily Rags

Oil or gas-soaked rags should be safely disposed of after use using two steps:
Hang them outside to dry in a safe area or spread them out flat, making sure they are weighted down outdoors. They should not be in a pile. Once they are dry, they should be disposed of properly.

For small home projects, once dried, oily rags should be stored in a small, airtight, non-combustible (such as metal) container with a tight-fitting lid. An old paint can is a good example. The rags should be completely covered with a solution of water and an oil breakdown detergent. Do not add any other combustible material (stuff that can catch fire). The user should then dispose of the rags during a city-sponsored hazardous waste collection day.

For more information, *Disposal of Oily Rags,* under *Fire Safety Topics,* on the DFS website – http://www.mass.gov/dfs.